



# UNITED STATES PATENT AND TRADEMARK OFFICE

*WAA*  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/738,474	12/17/2003	Yi Yen Lin	10113521	8215

34283 7590 09/11/2006

QUINTERO LAW OFFICE  
1617 BROADWAY, 3RD FLOOR  
SANTA MONICA, CA 90404

EXAMINER

NGUYEN, LEE

ART UNIT PAPER NUMBER

2618

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/738,474	<b>Applicant(s)</b> LIN, YI YEN	
	<b>Examiner</b> LEE NGUYEN	<b>Art Unit</b> 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-11 and 13-20 is/are rejected.
- 7) ☒ Claim(s) 4, 5 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                               | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                      | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-11, and 17-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kobayashi et al. (US 5,722,055).

Regarding claim 1, Kobayashi teaches a mobile phone (figs. 1, 6, 10) comprising: a housing including a front case 25 (fig. 1); a printed circuit board 41, disposed in the housing, including a notch 41-1-3 (fig. 6); a connector 41-11 fitted into the notch of the printed circuit board 41 (fig. 6); and a microphone 21 disposed in the connector in a manner such that the microphone faces the front case 25 (figs. 1, 6)

Regarding claim 2, Kobayashi also teaches that the connector includes a pad 41-11-1 abutted by a surface, facing the front case 25, of the printed circuit board 41, and the printed circuit board 41 inherently includes a circuit electrically connected to the pad 41-

11-1 so that the audio received by the microphone 21 can be conveyed to the printed circuit board 41 (figs. 1, 6, 10).

Regarding claim 3, Kobayashi also teaches that the pad 41-11-1 is located near an end, facing the front case 25, of the connector (fig. 6, numeral 41-11-3).

Regarding claim 6, Kobayashi inherently teaches that the front case 25 (fig. 1) includes a microphone hole corresponding to the microphone 21 so that the user can speak to the microphone 21.

Regarding claim 7, Kobayashi also teaches that the housing further includes a rear case 23 combined with the front case 25, and the printed circuit board 41, the microphone 21, and the connector 41-11 are surrounded by the front case 25 and the rear case 23 (figs. 1, 6).

Regarding claim 8, Kobayashi also teaches that the microphone 21 is abutted by the front case 25 (fig. 1).

Regarding claim 9, Kobayashi teaches a microphone module for a mobile phone (figs. 1, 6, 10), wherein the mobile phone comprises a printed circuit board 41 and a front case 25 (figs. 1, 6), and the microphone module comprises: a connector 41-11 fitted into

Art Unit: 2618

the printed circuit board 41; and a microphone 21 disposed in the connector 41-11 in a manner such that the microphone faces the front case 25 (figs. 1, 6).

Regarding claim 10, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 11, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claims 17-18, Kobayashi teaches a mobile phone (figs. 1, 6, 10) comprising: a housing including a front case 25 (fig. 1); a printed circuit board 41, disposed in the housing, including a notch 41-1-3 (fig. 6); a connector 41-11 fitted into the notch of the printed circuit board 41 (fig. 6); and a microphone 21 disposed in the connector in a manner such that the microphone faces the front case 25 (figs. 1, 6)

Regarding claim 19, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 20, the claim is interpreted and rejected for the same reason as set forth in claim 3.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al. in view of Hietanen (US 2002/0076041).

Regarding claim 13, Kobayashi teaches a mobile phone (figs. 1, 6, 10) comprising: a housing including a front case 25 (fig. 1); a printed circuit board 41, disposed in the housing, including a notch 41-1-3 (fig. 6); a connector 41-11 fitted into the notch of the printed circuit board 41 (fig. 6); and a microphone 21 disposed in the connector in a manner such that the microphone faces the front case 25 (figs. 1, 6). However, Kobayashi fails to teach that the mobile phone does not need a connector so that the microphone can be fitted to the notch. In other word, it is a surface mounted microphone, which can be mounted to the printed circuit board. In an analogous art, Hietanen teaches that there are many different ways to implement a microphone, including the surface mounted microphone, which can be mounted to the printed circuit board (see para [0016]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the microphone as a surface mounted microphone in order to eliminate the need of the connector, thereby reducing the cost of the device.

Regarding claim 14, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 15, the claim is interpreted and rejected for the same reason as set forth in claim 6.

Regarding claim 16, the claim is interpreted and rejected for the same reason as set forth in claim 7.

***Allowable Subject Matter***

Claims 4-5, 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Regarding claims 4, 12, the prior art of record fails to teach that the connector includes a first terminal and a second terminal, and the microphone includes a third terminal corresponding to the first terminal and a fourth terminal corresponding to the second terminal, whereby the microphone is electrically connected to the connector by the first terminal contacting the third terminal and the second terminal contacting the fourth terminal.

Art Unit: 2618

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE NGUYEN whose telephone number is 571-272-7854. The examiner can normally be reached on FIRST FRIDAY OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ANDERSON D. MATTHEW can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



LEE NGUYEN  
PRIMARY EXAMINER